

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT			1. CONTRACT ID CODE		PAGE OF PAGES 1 15		
2. AMENDMENT/MODIFICATION NO. 79		3. EFFECTIVE DATE See Block 16C		4. REQUISITION/PURCHASE REQ. NO.		5. PROJECT NO. (If applicable)	
6. ISSUED BY John F. Kennedy Space Center, NASA Procurement Office – ODIN – OP-MS Kennedy Space Center, FL 32899		CODE		7. ADMINISTERED BY (If other than Item 6)		CODE	
8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State, and Zip Code) OAO Corporation 7500 Greenway Center Drive Greenbelt MD 20770				(x)		9A. AMENDMENT OF SOLICITATION NO.	
						9B. DATED (SEE ITEM 11)	
						10A. MODIFICATION OF CONTRACT/ORDER NO. NAS5-98144/CC90303B	
						10B. DATED (SEE ITEM 13) December 1, 2001	
CODE		FACILITY CODE					
11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS							
<p>[] The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers [] is extended, [] is not extended. Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing Items 8 and 15, and returning ____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGEMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.</p>							
12. ACCOUNTING AND APPROPRIATION DATA (If required)							

13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS, IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.	
	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.
	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).
X	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF: NAS5-98144 Contract Clause C.7 Technology Refreshment Process and FAR Clause 52.212-4 Contract Terms and Conditions-Commercial Items, (c) Changes
	D. OTHER (Specify type of modification and authority)

E. IMPORTANT: Contractor [] is not, [**X**] is required to sign this document and return 1 copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)

Stennis Space Center --- ODIN SERVICES

Technology Infrastructure (FAST TRACK): SWR P203 3N06 00, P203 3N10 00, NJ00 L3AC 00, P203 3N08 00, NJ00 L3AE 00, NJ00 L3AD 00, BB51 3333 00, P203 3N12 00, P203 3N20 00, P203 3N13 00, P203 3N17 00, P203 3N22 00, P203 3N21 00, P203 3RAD 00, C0TC 3TRL 00

Change in Delivery Order Price: \$104,943.87 (INCREASE)

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER (Type or print) Keith Spencer Contracts Manager		16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print) Timothy M. Freeland Contracting Officer	
15B. CONTRACTOR/OFFEROR	15C. DATE SIGNED	16B. UNITED STATES OF AMERICA	16C. DATE SIGNED
(Signature of person authorized to sign)		BY (Signature of Contracting Officer)	

1. In accordance with Master Contract NAS5-98144, C.7, Technology Refreshment Process, the technology refreshment services referenced below are hereby incorporated into this Delivery Order at a fixed price of \$104,943.87.

SWR #	Subject	Amount
P203-3N06-00	Install Cat5 wiring in offices that don't have Cat5 wiring for MSCI companies	\$7,135.21
P203-3N10-00	Cable plant expansion in B8110 for NASA	\$1,696.47
NJ00-L3AC-00	Cable Plant Expansion in room 104 of B1002 for NAVOCEANO	\$10,200.98
P203-3N08-00	Blackberry usage at SSC	\$24,063.34
BB51-3333-00	Install fiber cable in B1210 and B1100S for EASD of NASA.	\$3,015.80
NJ00-L3AD-00	Install new wiring in Room 70 for NAVOCEANO	\$5,122.45
NJ00-L3AE-00	Removal of old wiring and intallation of new wiring for NAVOCEANO	\$21,901.60
P203-3N12-00	Install Car5 and Cat3 wiring to support new modular furniture in room 11125 of B1100	\$3,859.17
P203-3N20-00	Temporary wiring	\$1,730.92
P203-3N13-00	Reconfiguration of the SSC Border	\$2,441.37
P203-3N17-00	Install 2 Cat6 Wires in Center Directors Office	\$975.88
P203-3N22-00	Create New VLAN and Place Fiber Jumpers	\$375.42
P203-3N21-00	Installation of Cat5 and Singlemode Fiber	\$6,217.00
P203-3RAD-00	Update SSC Telecommunications Trunked Radio Software	\$4,361.40
C0TC-3TRL-00	Install Cat5 and Cat3 Wiring in support of Navy Exchange	\$11,846.86
	TOTAL	\$104,943.87

2. SWR P203 3N06 00

The contractor shall provide the labor (including, but not limited to, engineering, configuration management, user coordination/scheduling, wiring/cabling and equipment installation) and materials necessary to install Cat5 wiring in offices that don't have Cat5 wiring for MSCI companies as identified in OAO proposal dated December 31, 2002.

- a. The contractor shall perform the following tasks:

- (1) Install (2) Cat5 wires to (13) locations in B1103.
- (2) Install dual Cat5 jacks at each of the (13) locations.
- (3) Relocate (16) telephone wires into network faceplates.
- (4) Remove old Cat4 Token Ring wiring from all rooms back to room 202F.
- (5) Cover holes where Token Ring wiring was removed with blank faceplates.
- (6) Test and label new Cat5 wiring.
- (7) Redline drawing and give to LMIT so they can be updated.
- (8) Provide 14 FT Cat5 station cords to connect PC to wall jacks.

b. The contractor shall provide the following material:

- (1) 5000 Feet of Avaya 2061 Cat5 wire (CMP-00424MAX-6U) Blue
- (2) 35 each AMP blank faceplates (556029-01)
- (3) 35 each 14 FT Cat5 station cords (MM14-AX5-06) blue
- (4) 26 each 110C-4 connectors for 110 wiring blocks (073039)
- (5) 26 each IMO II PCB blank modules (148027)
- (6) 16 each IMO II PCB dual RJ11 USOC jacks (148035)
- (7) 13 each IMO II PCB dual T568A Cat5 jacks (148034)
- (8) 13 each IMO II PCB singlegang faceplates (148025)
- (9) 13 each caddy clips (157703)

c. Schedule: This effort shall be complete by three weeks after "Fast Track" approval to begin work, or February 6, 2003.

3. SWR P203 3N10 00

The contractor shall provide the labor (including, but not limited to, engineering, configuration management, user coordination/scheduling, wiring/cabling and equipment installation) and materials necessary to install (1) 6-strand single-mode fiber cable in B8110 to upgrade connection to network hub that is being installed for MEI upgrade for NASA as identified in OAO proposal dated January 3, 2003.

a. The contractor shall perform the following tasks:

- (1) Install (1) 6-strand singlemode fiber cable from room 111 to room 120.
- (2) Install (1) 10A panel and (6) singlemode couplers in existing LIU in room 120.
- (3) Install (1) 10A panel and (6) singlemode couplers in existing LIU in room 111.
- (4) Terminate all fiber into singlemode ST connectors on both ends and place in existing Luis.
- (5) Test and label fiber on both ends..

b. The contractor shall provide the following material:

- (1) 170 feet of Corning 6-strand PVC singlemode fiber cable (370-342-ASMODE-06)
- (2) 12 each P3020A_Z_125 ST connectors (157475)
- (3) 12 each C300A-2 singlemode ST couplers (105263)
- (4) 12 each cool cure consumables (142172)
- (5) 2 each 10A panels for Luis (088980)

c. Schedule: This effort shall be complete by three weeks after "Fast Track" approval to begin work, or February 6, 2003.

4. SWR NJ00 L3AC 00

The contractor shall provide the labor (including, but not limited to, engineering, configuration management, user coordination/scheduling, wiring/cabling and equipment installation) and materials necessary to Install Cat5e wiring in room 104 area of B1002 for NAVOCEANO as identified in OAO proposal dated January 6, 2003.

a. The contractor shall perform the following tasks:

- (1) Install (2) Cat5e wires to (30) locations in room 104 area.
- (2) Relocate approximately (15) duplex multimode fiber cables from power poles and walls that are being torn down to cubicles.
- (3) Install (2) 110 jack panels in room 128.
- (4) Terminate Cat5e wires on the (2) new 110 jack panels that were installed in item (3) above.
- (5) Test and label Cat5 e wires on both ends.
- (6) LMIT to update drawings.
- (7) Remove old wiring from ceiling back to communications closets.

a. The contractor shall provide the following material:

- (1) 10,000 feet of Belden Cat5 blue wire (CMP-00424BEL-5U-06)
- (2) 30 each IMO II PCB dual T568B Cat5e jacks (148031)
- (3) 12 each 8-meter multimode ST/ST duplex fiber jumper (199445)
- (4) 2 each Avaya 110 jack panel block (200666)

c. Schedule: This effort shall be complete by four weeks after "Fast Track" approval to begin work, or February 20, 2003.

5. SWR P203 3N08 00

The contractor shall provide the labor (including, but not limited to, engineering, configuration management, user coordination/scheduling, wiring/cabling and equipment installation) and materials necessary to install new Dell PowerEdge 350 server and install GFE BlackBerry Enterprise Server software on server in room 120S of B1201 for NASA to serve all BlackBerry users at SSC as identified in OAO proposal dated January 16, 2003.

a. The contractor shall perform the following tasks:

- (3) Install new Dell PowerEdge 350 server in room 120S of B1201.
- (4) Install GFE BlackBerry Enterprise server software on server installed in item (1) above.
- (5) Test server and software prior to turning over to NASA.
- (6) Provide sustaining support and S/W maintenance.

b. The contractor shall provide the following material:

- (1) 1 each Dell PowerEdge 350 server equipped with the following:
 - (a) PE350, 850 MHz Celeron, 128KB L2 Cache
 - (b) 256MB SDRAM, 1x256MB DIMM
 - (c) 20GB 7.2K RPM IDE Hard Drive
 - (d) Motherboard IDE
 - (e) Dual On-Board NICs only
 - (f) Windows 2000 Server with 5 Client Licenses, 4GB Utility Partition
 - (g) 4-Post Rack Kit for Dell Rack
 - (h) Logitech System Mouse
 - (i) Documentation for Dell PowerEdge 350
 - (j) 3-Year BRONZE Support, Next Business Day Onsite

- c. Schedule: This effort shall be complete by one week after "Fast Track" approval to begin work, or February 4, 2003.

6. SWR NJ00 L3AE 00

The contractor shall provide the labor (including, but not limited to, engineering, configuration management, user coordination/scheduling, wiring/cabling and equipment installation) and materials necessary to remove all old wiring and replace with new wiring in the same faceplate for NAVOCEANO as identified in OAO proposal dated January 14, 2003.

- a. The contractor shall perform the following tasks:

- (1) Install (2) Cat5 red wires and (1) duplex multimode fiber cable from (15) classified locations in room 75 to room 108 of B1003.
- (2) Install (2) Cat5 blue wires and (1) duplex multimode fiber cable from (7) unclassified locations in room 75 to room 108 of B1003.
- (3) Install (1) level 3 white wire from (8) locations in room 75 to room 70 in B1003.
- (4) Install (1) 96-port fiber cabinet for the classified fibers that are to be terminated in room 108.
- (5) Install (1) 96-port fiber cabinet for the unclassified fibers that are to be terminated in room 108.
- (6) Install (1) 110 cross-connect jack panel in room 108 for the classified Cat5 wires.
- (7) Install (1) 110 cross-connect jack panel in room 108 for the unclassified Cat5 wires.
- (8) Install Panduit raceway inside of room 75 below ceiling and install classified Cat5 wires and multimode fiber cables to new rigid conduits placed by other contractor to room 108.
- (9) Terminate duplex multimode fiber cables into ST connectors on both ends. Place one end in new 96-port fiber cabinets in room 108 and the other end into a duplex fiber insert at the station end. One for classified and one for unclassified fibers.
- (10) Terminate all Cat5 wiring on (2) new 110 cross-connect panels in room 108 and the other end on dual Cat5 jacks at station end. One 110 panel for classified and one for unclassified.
- (11) Terminate level 3 wiring on existing 110 wiring blocks in room 70 and the other end on dual RJ11 USOC jacks at station end.
- (12) Install (18) Panduit outlet boxes to house the classified and unclassified jacks.
- (13) Test and label Cat5 jacks.
- (14) Test and label fiber jacks.
- (15) Test and label telephone jacks.
- (16) Update drawings with jack numbers.

- b. The contractor shall provide the following material:

- (1) 4,000 FT of Cat5 plenum red wire (CM-0042BEL5U-03)
- (2) 3,000 FT of multimode duplex corning MIC fiber cable (370-949-FDDI-02)
- (3) 2,000 FT of Cat5 plenum blue wire (CMP-004242BEL-5U-06)
- (4) 2,000 FT of Cat3 plenum wire (CMP-00424MAX-3U)
- (5) 100 each P2020C-C-125 multimode ST connectors (118974)
- (6) 33 FT of Panduit TG70 Base & Cover (TG70IW8) (230476) 8 feet lengths
- (7) 23 each IMO II PCB singlegang faceplates (148025)

- (8) 22 each IMO II PCB fiber inserts (162979)
- (9) 22 each IMO II PCB dual T568B Cat5 jacks (148031)
- (10) 20 each Panduit LD5 6 feet lengths (131156)
- (11) 20 each IMO II PCB blanks (148027)
- (12) 18 each Panduit outlet boxes (205872)
- (13) 11 each Panduit TG70 transition fitting (TGTRIW) (249998)
- (14) 10 packs Panduit TG70 wire retainers (TG70WR-X) (250004)
- (15) 8 each Panduit LD10 raceway (131155)
- (16) 8 each Panduit TG70 inside corners (230478)
- (17) 8 each Panduit TG70 outside corners ((TGOCIW) (249996)
- (18) 8 each IMO II PCB dual RJ11 USOC jack (148035)
- (19) 6 each Caddy clips (157703)
- (20) 2 packs Panduit TG70 end caps (230485)
- (21) 2 each Century 96-port fiber cabinet (FCL-96SL-LM96)
- (22) 2 each Avaya 110 jack panel (200666)
- (23) 1 pack Panduit Tee's (142140)
- (24) 1 pack Panduit inside corners (131130)
- (25) 1 pack Panduit outside corners (131128)
- (26) 1 pack Panduit end caps (131132)
- (27) 1 pack Panduit right angle (131126)
- (28) 1 pack Panduit reducer fitting (142142)

- c. Schedule: This effort shall be complete by four weeks after "Fast Track" approval to begin work, or March 3, 2003.

7. SWR NJ00 L3AD 00

The contractor shall provide the labor (including, but not limited to, engineering, configuration management, user coordination/scheduling, wiring/cabling and equipment installation) and materials necessary to remove all wiring from the rear part of old room 75 back to room 70 (communications closet). Install all new wiring from room 70 (communications closet) thru designated hole into SCIF area for NAVOCEANO. Install (2) duplex fiber cables from room 108 to the SCIF to be used for classified and unclassified network hubs as identified in OAO proposal dated January 16, 2003

- a. The contractor shall perform the following tasks:

- (1) Remove all wiring that now exist in this room back to communications closet.
- (2) Install (1) 4-pair plenum level 3 wire thru (1) hole that leads into SCIF to (14) locations back to room 70.
- (3) Install (14) dual RJ11 jacks and terminate wire installed in item (2) above.
- (4) Install (1) duplex multimode fiber cable from room 108 thru Panduit below ceiling to SCIF room 75 for classified networks.
- (5) Install (1) duplex multimode fiber cable from room 108 thru ceiling to SCIF room 75 for unclassified networks.
- (6) Terminate fiber into ST connectors and place in (1) duplex fiber insert and place into (1) singlegang faceplate e/w (1) blank and place into new Panduit outlet box for the classified network hub.
- (7) Terminate fiber into ST connectors and place in (1) duplex fiber insert and place into (1) singlegang faceplate e/w (1) blank and place into caddy clip for unclassified network hub.

- (8) Test and label fiber.
- (9) Reline drawing and give to LMIT.

b. The contractor shall provide the following material:

- (1) 2,000 feet of Avaya plenum Cat3 white wire (CMP-00424MAX-3U)
- (2) 400 feet of Corning MIC duplex fiber cable (370-949-FDDI-02)
- (3) 32 each IMO II PCB blank module (148027)
- (4) 16 each IMO II PCB singlegang faceplate (148025)
- (5) 14 each IMO II PCB USOC dual jacks (148035)
- (6) 13 each Caddy clips (157703)
- (7) 8 each P2020C-C-125 multimode ST connectors (118974)
- (8) 8 each cool cure consumables (142172)
- (9) 5 each Panduit LD10 raceway 6/FT section (131155)
- (10) 2 each IMO II PCB duplex fiber insert (162979)
- (11) 1 pack of Panduit Tees (142140)
- (12) 1 pack of Panduit inside corners (131130)
- (13) 1 pack of Panduit outside corners (131128)
- (14) 1 pack of Panduit end caps (131132)
- (15) 1 pack of Panduit right angle (131126)
- (16) 1 pack of Panduit reducer fitting (142142)
- (17) 1 each Panduit deep outlet box (207082)

c. Schedule: This effort shall be complete by three weeks after "Fast Track" approval to begin work, or February 24, 2003.

8. SWR BB51 3333 00

The contractor shall provide the labor (including, but not limited to, engineering, configuration management, user coordination/scheduling, wiring/cabling and equipment installation) and materials necessary install (1) 4-fiber singlemode fiber cable in B1210 and B1100S to be used for a Terraburst Evaluation connection for ESAD of NASA as identified in OAO proposal dated January 15, 2003.

a. The contractor shall perform the following tasks:

- (1) (1) Install (1) 4-strand singlemode fiber cable from room 117 to room 115 and terminate fiber into ST connectors and place in (1) 4-fiber insert and place in (1) singlegang faceplate in room 115 of B1210.
- (2) Terminate the other end into ST connectors and place in existing LGX panel in room 117.
- (3) (3) Install (1) 4-strand singlemode fiber cable from room 22228 to room 22219 and terminate in ST connectors and place in (1) 4-fiber insert and place in (1) singlegang faceplate in room 22219 of B1100S.
- (4) Install (1) GFE LGX panel in room 22228 of B1100S.
- (5) Terminate the other end and place in (1) GFE LGX panel that was installed in item (4) above.
- (6) Test and label both ends.
- (7) Update drawing showing new fiber locations.

b. The contractor shall provide the following material:

- (1) 300 feet of Corning plenum singlemode fiber cable (370-948-SMODE-04)
- (2) 16 each P3020A-Z-125 singlemode ST connectors (157475)
- (3) 16 each cool cure consumables (142172)
- (4) 8 each C3000A-2 singlemode ST couplers (105263)
- (5) 2 each IMO II PCB singlegang faceplates (148025)
- (6) 2 each IMO II PCB 4-fiber inserts (173628)
- (7) 2 each 1-meter singlemode ST/ST fiber jumper (151986)
- (8) 2 each 2-meter singlemode ST/ST fiber jumper (151987)
- (9) 2 each 3-meter singlemode ST/SC fiber jumper (152038)

- c. Schedule: This effort shall be complete by three weeks after "Fast Track" approval to begin work, or February 21, 2003.

9. SWR P203 3N12 00

The contractor shall provide the labor (including, but not limited to, engineering, configuration management, user coordination/scheduling, wiring/cabling and equipment installation) and materials necessary to install Cat5 and Cat3 wiring to support new modular furniture being installed in room 11125 of B1100 South as identified in OAO proposal dated January 28, 2003.

- a. The contractor shall perform the following tasks:

- (1) Install (2) Cat5 wires to (7) locations in room 11125 in new modular furniture.
- (2) Install (2) Cat5 wires to (1) location in room 11125 for network printer.
- (3) Install (1) Cat3 wire to (7) locations in room 11125 in new modular furniture.
- (4) Install (1) 110 wiring block in room 11128.
- (5) Install (7) Panduit outlet boxes in modular furniture.
- (6) Install (8) Caddy faceplate clips for wire to come out of the wall.
- (7) Install (1) dual Cat5 jack to (8) locations and terminate (2) Cat5 wires on them.
- (8) Install (1) dual Cat3 jack to (7) locations and terminate (1) Cat3 wire on them.
- (9) Install the above jacks in (8) faceplates.
- (10) Terminate Cat5 wires on new 110 wiring block in room 11128.
- (11) Terminate Cat3 wires on existing 110 wiring block in room 11128.
- (12) Test and label all Cat5 wires at both ends.
- (13) Test and label all Cat3 wires at both ends.
- (14) Update drawings with new jack numbers.

- b. The contractor shall provide the following material:

- (1) 2,000 feet of Belden Cat5 blue Plenum wire (CMP-00424BEL-5U-06)
- (2) 1,000 feet of Avaya Cat3 white plenum wire (CMP-00424MAX-3U)
- (3) 12 each 14 feet station blue cords (MM14-AX5-06)
- (4) 9 each IMO II PCB blank modules (138027)
- (5) 8 Caddy faceplate clips (157703)
- (6) 8 each IMO II PCB dual Cat5 T568B jacks (148031)
- (7) 8 each IMO II PCB singlegang faceplate (148025)
- (8) 7 each IMO II PCB dual RJ11 USOC jacks (148035)
- (9) 7 each Panduit deep outlet boxes (207082)
- (10) 3 packs of 110C-4 connectors for 110 wiring blocks (073039)
- (11) 1 each 110AW2-300 wiring block (154071)

- b. Schedule: This effort shall be complete by three weeks after "Fast Track" approval to begin work, or March 3, 2003.

10. SWR P203 3N20 00

The contractor shall provide the labor (including, but not limited to, engineering, configuration management, user coordination/scheduling, wiring/cabling and equipment installation) and materials necessary to install GFE Cat5e cables in room 101 of B1110 as a temporary fix until the IFMP has gone into effect at KSC as identified in OAO proposal dated February 6, 2003.

- a. The contractor shall perform the following tasks:
 - (3) Install GFE Cat5e cables in room 101 to support the installation of new equipment cabinets.
 - (4) Remove old Cat5e cables due to them being too short to reach the new cabinets.
 - (5) OAO to save old cables to use at some future date.
- b. The contractor is not required to provide any material for this upgrade.
- c. Schedule: This effort shall be complete by one and a half weeks after "Fast Track" approval to begin work, or February 24, 2003.

11. SWR P203 3N13 00

The contractor shall provide the labor (including, but not limited to, engineering, configuration management, user coordination/scheduling, wiring/cabling and equipment installation) and materials necessary to reconfigure the SSC border to accommodate BGP routing and the relocation of the victim to the border router as identified in OAO proposal dated February 5, 2003.

- a. The contractor shall perform the following tasks:
 - (1) Reconfigure border router to newly assigned IP given by NISN
 - (2) Reconfigure border router to run BGP by NISN parameters
 - (3) Relocate the victim net to a new 2950 off of the border router on a 10/half interface
 - (4) Update drawings
 - (5) Do bench mark testing to validate SIP and PIP connection is functional.
- b. The contractor shall provide the following material:
 - (1) 1 GFE Cisco Catalyst 2950
 - (2) 5 each 25 foot Red Cat5E cross over cables
 - (3) 5 each 10 foot Red Cat5E cross over cables
- c. Schedule: This effort shall be complete by ten weeks after "Fast Track" approval to begin work, or April 25, 2003.

12. SWR P203 3N17 00

The contractor shall provide the labor (including, but not limited to, engineering, configuration management, user coordination/scheduling, wiring/cabling and equipment installation) and materials necessary to install (2) Cat6 wires in NASA Directors office to support a new Tandberg-1000 video conferencing system as identified in OAO proposal dated February 14, 2003.

a. The contractor shall perform the following tasks:

- (1) Install (2) Cat6 plenum wires from room 334 to room 345 and terminate on existing 110 wiring block.
- (2) Install (1) faceplate e/w (2) Cat6 jacks and (2) blanks in room 334.
- (3) Install (1) caddy clip in wall to hold faceplate.
- (4) Provide (1) 3-foot Cat6 green patch cord to connect from jack to Tandberg-1000.
- (5) Test and label Cat6 jacks.
- (6) Provide LMIT with redline drawing showing jack number and location.

b. The contractor shall provide the following material:

- (1) 200 feet of Avaya level 7 plenum wire (CMP-00424MAX-7U-06) blue
- (2) 2 each 110C-4 connector for 110 wiring block (073039) 5 each 10 foot
- (3) 2 each Avaya M81 modular blank (169229)
- (4) 2 each Avaya T568A/B Cat6 jack (246746) green
- (5) 1 each caddy faceplate clips (157703)
- (6) 1 each Avaya M14L 4-hole faceplate (197613) white
- (7) 1 each 3 feet Cat6 patch cord (MM03-AV7E-04) green

c. Schedule: This effort shall be complete by two weeks after "Fast Track" approval to begin work, or March 11, 2003.

13. SWR P203 3N22 00

The contractor shall provide the labor (including, but not limited to, engineering, configuration management, user coordination/scheduling, wiring/cabling and equipment installation) and materials necessary to create a new VLAN and place fiber jumpers to activate circuit between NASA and the Navy Bunkers as identified in OAO proposal dated February 17, 2003.

a. The contractor shall perform the following tasks:

- (1) The creation on a new VLAN named NAVY bunker.
- (2) The removal of 1210 to 1103 ITD circuit and VLAN.
- (3) Provide a single mode circuit to the Navy bunkers form 1210.
- (4) Update drawings and provide copies to the NASA network engineer

b. The contractor shall provide the following material:

- (1) 1 each singlemode 1 meter ST/ST fiber jumper
- (2) 1 each singlemode 3 meter ST/ST fiber jumper

c. Schedule: This effort shall be complete by four weeks after "Fast Track" approval to begin work, or March 25, 2003.

14. SWR P203 3N21 00

The contractor shall provide the labor (including, but not limited to, engineering, configuration management, user coordination/scheduling, wiring/cabling and equipment installation) and materials necessary install Cat6 and singlemode fiber from room 116 to room 128 in B1201 in support of the NISN Gateway as identified in OAO proposal dated March 7, 2003.

a. The contractor shall perform the following tasks:

- (1) Install (12) Cat6 wires from room 116 to room 128.
- (2) Install (1) 24-port Cat6 patch panel in room 116 and room 128 and terminate wire.
- (3) Install (1) 12-strand singlemode fiber cable from existing LGX rack in room 116 to (2) new 100A LIU's in room 128.
- (4) Terminate fiber into ST connectors and place in LGX and LIU's.
- (5) Provide Cat6 patch cords for both ends.
- (6) Test and label Cat6 wiring.
- (7) Test and label fiber cable.
- (8) Provide redline drawing to OAO so they can update drawings.

b. The contractor shall provide the following material:

- (1) 200 feet of Corning singlemode fiber cable (370-948-SMODE-12)
- (2) 24 each P3020A-Z-125 singlemode ST connectors (157475)
- (3) 24 each C3000A-2 singlemode ST couplers (105263)
- (4) 24 each cool cure consumables (142172)
- (5) 12 each 10 feet Cat6 station cords (MM10-AV7E-04) green
- (6) 6 each 3 feet Cat6 station cords (MM03-AV7E-04) green
- (7) 6 each 1-meter Cat6 crossover cable (D03-0210-3-04) green
- (8) 4 each Avaya patch cord organizer (155563)
- (9) 2 each Avaya 100A3 LIU (146050)
- (10) 2 each Avaya ST 10A panels (088980)
- (11) 2 each Avaya GigaSpeed patch panel 24-port (246728)

c. Schedule: This effort shall be complete by four weeks after "Fast Track" approval to begin work, or April 10, 2003.

15. SWR P203 3RAD 00

The contractor shall provide the labor (including, but not limited to, engineering, configuration management, user coordination/scheduling, wiring/cabling and equipment installation) and materials necessary to update the SSC Telecommunications Trunked Radio software as identified in OAO proposal dated March 10, 2003.

a. The contractor shall perform the following tasks:

- (1) Update software to the latest revision once this Implementation Plan is approved.
- (2) Genesis will provide support and maintenance once this Implementation Plan is approved.

- (3) LMIT will send monthly reports to NASA.
- b. The contractor shall provide the following material:
 - (1) Genesis Software upgrade to EzBill, Ctech Logger & EzSave for this job will be provided with the purchase of Annual Support and Maintenance of the three listed above.
- c. Schedule: This effort shall be complete by four weeks after "Fast Track" approval to begin work, or April 10, 2003.

16. SWR C0TC 3TRL 00

The contractor shall provide the labor (including, but not limited to, engineering, configuration management, user coordination/scheduling, wiring/cabling and equipment installation) and materials necessary to install Cat5 and Cat3 wiring in room S180A in B1100, install Cat5 and Cat3 wiring and 25-pair aerial copper cable to new trailer next to Child Care to support Navy Exchange as identified in OAO proposal dated March 12, 2003.

- a. The contractor shall perform the following tasks:

B1100

- (1) Install (8) Cat5 wires in room S180A back to room S180B
- (2) Install (8) Cat5 jacks in room S180A.
- (3) Install (1) 12-port Cat5 patch panel in GFE rack in room S180B.
- (4) Install (4) Cat3 wires in room S180A and put in same faceplate with Cat5.
- (5) Install (2) Cat3 wires in room S180B to be used for T1 and DSL circuits.
- (6) Test and label Cat5 and Cat3 wiring.
- (7) Provide redline drawings to LMIT so they can update drawings.

Trailer

- (1) Install (8) Cat5 wires in trailer back to closet.
- (2) Install (8) Cat5 jacks in trailer.
- (3) Install (1) 12-port Cat5 patch panel in GFE rack in trailer.
- (4) Install (5) Cat3 wires in trailer and place in same faceplate with Cat5.
- (5) Test and label Cat5 and Cat3 wiring.
- (6) Provide redline drawings to LMIT so they can update drawings.
- (7) Install (1) 25-pair aerial copper cable from pole next to Child Care to trailer using existing strand between poles.
- (8) Trench from pole to trailer.
- (9) Place 2" PVC conduit in trench and place 25-pair copper cable to trailer.
- (10) Install (1) 25-pair station protector inside of trailer.
- (11) Make 25-pair aerial splice on pole next to Child Care.
- (12) Make 25-pair building splice in trailer.
- (13) Test cable pairs from trailer back to B2204 communications closet.
- (14) Extend T1 circuit from demark in B1201 to room S180B in B1100.
- (15) Extend DSL circuit from demark in room S180B in B1100 to trailer.

- b. The contractor shall provide the following material:

- (1) 4000 feet of Avaya Cat3 white wire (CMP-00424MAX-3U)
- (2) 3000 feet of Belden Cat5 blue wire (CMP-00424BEL-5U-06)
- (3) 600 feet of lashing wire
- (4) 400 feet of 25-pair outdoor cable (E-002524-DFC)
- (5) 100 feet of 2" PVC schedule 80 conduit
- (6) 25 each Avaya 3B1E-W protector modules (105114)
- (7) 20 each IMO II PCB blank modules (148027)
- (8) 20 each IMO II PCB singlegang faceplates (148025)
- (9) 16 each IMO II PCB single T568A/B Cat5 jack (248941)
- (10) 11 each IMO II PCB RJ11 USOC single jack (148035)
- (11) 10 each Panduit outlet boxes (207082)
- (12) 8 each Caddy clips (157703)
- (13) 6 each Panduit LD5 raceway 6 feet stick (131156)
- (14) 4 each 2" PVC couplers
- (15) 3 packs of 110C-4 connectors for 110 blocks (073039)
- (16) 2 each 2" PVC sweeping 90 degree bends
- (17) 2 each Ortronics Cat5 12-port patch panel (248945)
- (18) 2 each 188B2 backboard (112052)
- (19) 2 each Ortronics cable management (149782)
- (20) 1 each Avaya 489A 25-pair protector (195420)
- (21) 1 each Avaya 110 pair block (154069)
- (22) 1 each 710-SC1-25 splice module (237384)
- (23) 1 each T1AX circuit card (0110-0193)
- (24) 1 each T1A circuit card (0110-0192)
- (25) 1 each TO circuit card (0110-0147)

c. Schedule: This effort shall be complete by two weeks after "Fast Track" approval to begin work, or March 27, 2003.

17. Part II "Contract Administration Data", Item 4, is revised as indicated below to incorporate the increase of \$104,943.87 for these infrastructure upgrades:

4. TOTAL DELIVERY ORDER VALUE (through Mod No. 79)

Ordered Seats and Services	\$ 5,519,332.68
Catalog Actuals	\$ 327,963.23
Specialized Services Actuals	\$ 4,500.00
Infrastructure upgrades	\$ 1,601,523.21
Fast Track Mods Authorized	\$ -
Subtotal	\$ 7,453,319.12
Less credits	\$ (2,625.55)
Less retainage not earned	\$ (50,950.46)
Subtotal	\$ 7,399,743.11
Seats/service levels projected through 11/30/04	\$ 7,951,444.05
Total Estimated Delivery Order Value	\$ 15,351,187.16

18. V "Technology Infusion (Infrastructure Upgrades)", Item 2 is modified to include the subject infrastructure upgrades. The signed date and completion date will be completed in a future infrastructure upgrade modification.

Mod. No.	Description of Work	Date Signed	Completion Date	Modification Value
79	SWR P203-3N06-00 Install Cat5 wiring in offices that don't have Cat5 wiring for MSCI companies			\$7,135.21
79	SWR P203-3N10-00 Cable plant expansion in B8110 for NASA			\$1,696.47
79	SWR NJ00-L3AC-00 Cable Plant Expansion in room 104 of B1002 for NAVOCEANO			\$10,200.98
79	SWR P203-3N08-00 Blackberry usage at SSC			\$24,063.34
79	SWR BB51-3333-00 Install fiber cable in B1210 and B1100S for EASD of NASA.			\$3,015.80
79	SWR NJ00-L3AD-00 Install new wiring in Room 70 for NAVOCEANO			\$5,122.45
79	SWR NJ00-L3AE-00 Removal of old wiring and intallation of new wiring for NAVOCEANO			\$21,901.60
79	SWR P203-3N12-00 Install Car5 and Cat3 wiring to support new modular furniture in room 11125 of B1100			\$3,859.17
79	SWR P203-3N20-00 Temporary wiring			\$1,730.92
79	SWR P203-3N13-00 Reconfiguration of the SSC Border			\$2,441.37
79	SWR P203-3N17-00 Install 2 Cat6 Wires in Center Directors Office			\$975.88
79	SWR P203-3N22-00 Create New VLAN and Place Fiber Jumpers			\$375.42
79	SWR P203-3RAD-00 Update to SSC Trunked Radio software			\$4,361.40
79	SWR P203-3N21-00 Install Cat6 and singlemode fiber from room 116 to room 128 in B1201 in support of NISSN			\$6,217.00
79	SWR C0TC-3TRL-00 Install Cat5 and Cat3 wiring in support of Navy Exchange			\$11,846.86

19. Payment Schedule: Invoicing and Payment for this modification will be made in accordance with Master Contract NAS5-98144, FAR 52.212-4: Commercial Items (May 1997) (Modified).
20. Reporting requirements: The contractor shall provide monthly status reports to the SSC Alternate DOCOTR, with a copy to the DOCO. These reports shall include, as a minimum, installation progress, and potential problem areas.
21. In consideration of the modification agreed to herein as complete equitable adjustment for the changes set forth, the Contractor hereby releases the Government from any and all liability under this delivery order for further equitable adjustments attributable to such facts or circumstances giving rise to these changes.
22. All other terms and conditions of this Delivery Order remain unchanged and in full force and effect.